

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed December 13, 2005 ("Office Action"). In the Office Action, Claims 1-46 are pending in the Application. The Examiner rejects Claims 1-18 and 20-46; and objects to Claim 19. Applicants have amended Claims 1, 4-5, 21, 26, 35, 38, and 43 and canceled Claims 3 and 27. Applicants submit that no new matter has been added with these amendments. As described below, Applicants believe all claims to be allowable over the cited references. Therefore, Applicants respectfully request reconsideration and full allowance of all pending claims.

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication that Claim 19 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims. However, as discussed below, Applicants believe that independent Claim 1 (from which Claim 19 depends) is also allowable. Therefore, Applicants have elected not to amend Claim 19 at this time.

Amendments to the Specification

In the Office Action, the Examiner objects to the Specification and requests that that Applicants amend the Specification to supply the missing patent number in the "Related Applications" section of the Specification. In this Response, Applicants have amended the first paragraph of the Specification at Page 1, lines 7-13 to supply the missing information. Applicants request that the objection to the Specification be withdrawn.

Claim Objections

The Examiner objects to Claims 28 and 39 due to informalities. Specifically, the Examiner has questioned whether Claims 28 and 39 should depend from Claims 26 and 38, respectively, rather than Claims 21 and 35. Applicants appreciate the Examiner notation of any antecedent basis issues applicable to Applicants' claims. In this Response to Office Action, independent Claims 21 and 35 (from which Claims 28 and 39 depend, respectively) have been amended. As a result of these amendments, Applicants submit that the antecedent

basis issues identified by the Examiner have been cured. Applicants request that the objections to Claims 28 and 39 be withdrawn.

Section 102 Rejections

The Examiner rejects Claims 1-10, 12, 15, 17, 21-28, 30, 33, 35-40, and 42-45 under 35 U.S.C. § 102(e) as being clearly anticipated by U.S. Patent No. 6,603,394 issued to Raichle et al. ("*Raichle*").

Independent Claim 1, of the present Application, recites:

A system for vehicle protocol conversion, comprising:
a bus connector adapted to be coupled to a vehicle bus;
a protocol transceiver coupled to the bus connector, the protocol transceiver operable to:
 receive messages destined for communication through the bus connector and send the messages through the bus connector according to a vehicle bus protocol, and
 receive messages through the bus connector according to the vehicle bus protocol;
a computer coupled to the protocol transceiver, the computer operable to:
 analyze the messages received through the bus connector to determine whether the messages should be transmitted to a diagnostic system, the determination based on predetermined criteria set by the diagnostic system, and
 receive the messages destined for communication through the bus connector; and
a wireless communication device coupled to the computer, the wireless communication device, using a wireless link, operable to transmit the messages that should be transmitted and receive the messages destined for communication through the bus connector.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P § 2131. In addition, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claims" and "[t]he elements must be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P § 2131 (*emphasis added*). Whether considered

alone or in combination with any other cited references, *Raichle* does not disclose, either expressly or inherently, each and every element of the claims.

For example, Applicants respectfully submit that *Raichle* does not disclose, teach, or suggest “a computer coupled to the protocol transceiver, the computer operable to . . . analyze the messages received through the bus connector to determine whether the messages should be transmitted to a diagnostic system,” as recited in Claim 1. While *Raichle* discloses a “wireless communication module [that] communicates with a remote station and a plurality of motor vehicle control units that implement at least two different communication protocols within a single motor vehicle” (Abstract), Applicants submit that the processor 102 of *Raichle* does not perform the above-recited features and operations of Applicants’ Claim 1.

According to *Raichle*, processor 102 receives requests from an RF remote station. (Column 4, lines 25-27). Based upon these requests, “processor 102 runs selected communication routines to communicate with selected vehicle control units.” (Column 4, lines 25-27). An example of the process is described by *Raichle* with respect to FIGURE 1C:

With remote station 160, a technician can initiate a diagnostic or translation routine in a motor vehicle through workstations 166 or 168. Workstations 166 or 168 packetizes a technician-initiated command or request and transfers the packetized command across LAN 170 to RF interface 164. RF interface 164 receives and modulates the packetized command (according to the selected RF technique), before transmitting the modulated command through antenna 162. The modulated command is received by antenna 106 of wireless communication module 100 of FIG. 1A. At that point, RF interface 104 demodulates the modulated command and provides the command to processor 102. In response to the command, processor 102 performs a command specific routine. As is further discussed below, the command specific routine causes a protocol specific signal (or signals) to be sent to one of the motor vehicle control units.

(Column 5, lines 36-52). The above-described operations, however, merely explain the receipt and processing of diagnostic requests by processor 102 of *Raichle*. With respect to the receipt of data from the motor vehicle control units, *Raichle* merely discloses that processor 102 “can read error codes from a motor vehicle control unit” and “is programmed to provide modulated RF output signals of vehicle data to a remote diagnostic technician.”

(Column 4, lines 14-17 and 23-24). There is no disclosure in *Raichle*, however, of “analyz[ing] the messages received through the bus connector to determine whether the messages should be transmitted to a diagnostic system,” as recited in Claim 1.

As another example, *Raichle* does not disclose, teach, or suggest that “the determination [is] based on predetermined criteria set by the diagnostic system,” as recited in Claim 1. In the Office Action, the Examiner identified Column 4, lines 22-27 of *Raichle* as disclosing certain analogous features recited in now canceled Claim 3. Specifically, the Examiner stated that “[t]he predetermined criteria is whether the vehicle data is the one requested by the remote diagnostic technician (column 4, lines 22-27).” (Office Action, page 4). Applicants respectfully submit, however, that such an interpretation of *Raichle* reads more into the disclosure of *Raichle* than is actually disclosed. As discussed above, *Raichle* merely discloses that processor 102 “can read error codes from a motor vehicle control unit” and “is programmed to provide modulated RF output signals of vehicle data to a remote diagnostic technician.” (Column 4, lines 14-17 and 23-24). Accordingly, Applicants respectfully submit that *Raichle* does not disclose, teach, or suggest that “the determination [is] based on predetermined criteria set by the diagnostic system,” as recited in Claim 1.

Independent Claims 21, 35, and 43 recite certain features that are analogous to those discussed above. For example, Claim 21 recites “analyzing the messages to determine whether the messages should be transmitted to a diagnostic system, the determination based on predetermined criteria set by the diagnostic system.” As another example, Claim 35 recites “means for analyzing the messages to determine whether the messages should be transmitted to a diagnostic system, the determination based on a predetermined criteria set by the diagnostic system.” As still another example, Claim 43 recites “a computer coupled to the protocol transceivers, the computer operable to . . . receive the messages received through the bus connector and determine whether the messages should be transmitted to a diagnostic system, the determination based on predetermined criteria set by the diagnostic system.” Accordingly, for reasons similar to those discussed above, Applicants respectfully submit that *Raichle* does not disclose, teach, or suggest each and every limitation of Applicants’ Claims 21, 35, and 43.

Additionally, and with respect to Claim 43, Applicants respectfully submit that *Raichle* also does not disclose, teach, or suggest that the computer is further operable to “receive the messages destined for communication through the bus connector, [and] determine whether they should be sent through the bus connector.” As described above, *Raichle* merely discloses that “processor 102 performs a command specific routine . . . [to cause] a protocol specific signal (or signals) to be sent to one of the motor vehicle control units.” (Column 5, lines 36-52). Thus, processor 102 receives the command and simply performs the appropriate routine for the received command. There is no disclosure in *Raichle*, however, of a computer operable to “receive the messages destined for communication through the bus connector, [and] determine whether they should be sent through the bus connector,” as recited in independent Claim 43.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claims 1, 21, 35, and 43, together with the claims that depend from Claims 1, 21, 35, and 43.

Dependent Claims 2, 4-10, 12, 15, and 17 depend upon Claim 1, which Applicants have shown above to be allowable. Dependent Claims 22-26, 28, 30, and 33 depend upon Claim 21, which Applicants have shown above to be allowable. Dependent Claims 36-40 and 42 depend upon Claim 35, which Applicants have shown above to be allowable. Dependent Claims 44-45 depend on Claim 43, which Applicants have shown above to be allowable. Accordingly, dependent Claims 2, 4-10, 12, 15, 17, 22-26, 28, 30, 33, 36-40, 42, and 44-45 are allowable at least because of their respective dependencies.

Additionally, Claims dependent Claims 2, 4-10, 12, 15, 17, 22-26, 28, 30, 33, 36-40, 42, and 44-45 are patentable because they recite additional features and operations not disclosed, taught, or suggested in the prior art. For example, Claim 4 recites that “the computer examines the destination address of the messages to determine whether the messages satisfy predetermined criteria.” In the Office Action, the Examiner states that “[p]acketized messages for the remote diagnostic technician must inherently be checked in order to determine that they are addressed to the proper destination workstation that requested the data since there can be more than one workstation.” (Office Action, page 4).

In regard to inherency of a reference, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." MPEP § 2112 (citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993) (*emphasis original*)). Thus, in relying upon the theory of inherency, an Examiner must provide a basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. MPEP § 2112 (citing *Ex Parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. at App. and Inter. 1990) (*emphasis original*)). In this case, the Examiner has not provided a basis in fact and/or technical reasoning to support the determination that examining the destination address of the messages to determine whether the messages satisfy predetermined criteria necessarily flows from the teachings of *Raichle*. Furthermore, Applicants have shown above that *Raichle* merely discloses that processor 102 "can read error codes from a motor vehicle control unit" and "is programmed to provide modulated RF output signals of vehicle data to a remote diagnostic technician." (Column 4, lines 14-17 and 23-24). There is no indication in *Raichle* that the system of *Raichle* necessarily "examines the destination address of the messages to determine whether the messages satisfy predetermined criteria," as recited in Claim 4. As such, Applicants respectfully submit that the rejection of Claim 4 is improper.

As another example, Claim 6 recites that the computer "is further operable to analyze the messages destined for communication through the bus connector to determine whether they should be sent through the bus connector." Claim 23 and 36 recite certain analogous features and operations. Thus, for reasons similar to those described above with respect to Claim 43, Applicants respectfully submit that Claims 6, 23, and 36 are allowable. Specifically, Applicants have shown above that *Raichle* merely discloses that "processor 102 performs a command specific routine . . . [to cause] a protocol specific signal (or signals) to be sent to one of the motor vehicle control units." (Column 5, lines 36-52). Thus, processor 102 receives the command and simply performs the appropriate routine for the received command. There is no disclosure in *Raichle*, however, of a computer operable to "analyze the messages destined for communication through the bus connector to determine whether

they should be sent through the bus connector,” as recited in dependent Claim 6 and as analogously recited in Claims 23 and 36.

Section 103 Rejections

The Examiner rejects Claims 11, 13, 14, 16, 18, 20, 29, 31, 32, 34, 41, and 46 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of *Raichle* with Applicants’ admitted prior art, International Publication No. WO/00/72463 issued to Witkowski et al. (“*Witkowski*”), and “Bluetooth--A New Low-Power Radio Interface Providing Short-Range Connectivity,” by Jaap C. Haartsen (“*Haartsen*”).

Dependent Claims 11, 13, 14, 16, 18, and 20 depend upon Claim 1, which Applicants have shown above to be allowable. Dependent Claims 29, 31, 32, and 34 depend upon Claim 21, which Applicants have shown above to be allowable. Dependent Claims 41, and 46 depend upon Claims 35 and 43, respectively, which Applicants have shown above to be allowable. Accordingly, dependent Claims 11, 13, 14, 16, 18, 20, 29, 31, 32, 34, 41, and 46 are allowable at least because of their respective dependencies. Additionally, Claims dependent Claims 11, 13, 14, 16, 18, 20, 29, 31, 32, 34, 41, and 46 are patentable because they recite additional features and operations not disclosed, taught, or suggested in the prior art. Because Applicants have shown independent Claims 1, 21, 35, and 43 to be allowable, however, Applicants have not provided detailed arguments with respect to dependent Claims 11, 13, 14, 16, 18, 20, 29, 31, 32, 34, 41, and 46.

Additionally, and with respect to Claims 11 and 29, Applicants refute the Examiner’s finding that Applicants’ specification admits that the J1850, J1939, and J1587 protocols are prior art. In the Office Action, the Examiner cites Page 9, lines 9-12 of Applicants’ specification in support of this finding. This particular portion of Applicants’ specification, however, merely provides that “controllers 22 of vehicle 20 use a variety of different protocols, such as, for example, CAN 2.0B/J1939, J1708/J1587, Class 2B/J1850, or a proprietary protocol, to communicate messages over bus 24.” (Specification, Page 9, lines 9-12). Thus, Applicants specification merely describes that “[i]n these embodiments, protocol converter 30 may be able to convert messages in a variety of protocols on bus 24 into an

appropriate format for communication over wireless link 32 to diagnostic system.” (Page 9, lines 12-16). There is no admission in Applicants’ specification that these protocols as applied to the claimed “protocol transceivers” are known in the art. Furthermore, Applicants respectfully submit that the particular combination of elements recited in Claims 11 and 29 (i.e., a “first protocol transceiver . . . operable to send and receive messages through the bus connector according to J1939” and a “second protocol transceiver . . . operable to send and receive messages through the bus connector according to J1587,” as recited in Claim 11) would not have been obvious to one of ordinary skill in the art at the time of Applicants’ invention.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 11, 13, 14, 16, 18, 20, 29, 31, 32, 34, 41, and 46.

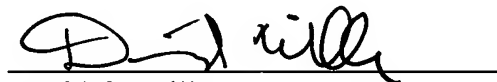
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clear and apparent, Applicants respectfully request reconsideration and allowance of the pending claims.

Applicants do not believe any fees are due. However, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 05-0765 of Electronic Data Systems Corporation.

If there are matters that can be discussed by telephone to advance prosecution of this application, Applicants invite the Examiner to contact its attorney at the number provided below.

Respectfully submitted,
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